

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/813,214 B

Source: IFW16

Date Processed by STIC: 7/21/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - cPAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby,
Room 1B03, Arlington, VA 22202

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/813,214 B

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
Wrappcd Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing
- 6 PatentIn 2.0
"bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s). Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
(OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence
(2) INFORMATION FOR SEQ ID NO: X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES" response to include the skipped sequences
- 8 Skipped Sequences
(NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's
(NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents
- 10 Invalid <213>
Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220>
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
"bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFW16

RAW SEQUENCE LISTING

DATE: 07/21/2004

PATENT APPLICATION: US/09/813,214B

TIME: 10:42:26

Input Set : A:\Seq Listing 089-999.txt

Output Set: N:\CRF4\07212004\I813214B.raw

(pg.6)

Does Not Comply
Corrected Diskette Needed

(pg.1-2)

5 <110> APPLICANT: Tucker, Kenneth
 7 Plosila, Laura
 11 <120> TITLE OF INVENTION: MORAXELLA CATARRHALIS OUTER MEMBRANE PROTEIN-106
 12 POLYPEPTIDE, GENE SEQUENCE AND USES THEREOF
 16 <130> FILE REFERENCE: 7969-089-999
 20 <140> CURRENT APPLICATION NUMBER: US 09/813,214B
 22 <141> CURRENT FILING DATE: 2001-03-20
 26 <150> PRIOR APPLICATION NUMBER: US 08/968,685
 28 <151> PRIOR FILING DATE: 1997-11-12
 32 <160> NUMBER OF SEQ ID NOS: 20
 36 <170> SOFTWARE: PatentIn version 3.0
 40 <210> SEQ ID NO: 1
 42 <211> LENGTH: 43
 44 <212> TYPE: PRT
 46 <213> ORGANISM: Moraxella catarrhalis
 50 <400> SEQUENCE: 1
 52 Ile Gly Ile Ser Glu Ala Asp Gly Gly Lys Gly Gly Ala Asn Ala Arg
 53 1 5 10 15
 55 Gly Asp Lys Ser Ile Ala Ile Gly Asp Ile Ala Gln Ala Leu Gly Ser
 56 20 25 30
 58 Gln Ser Ile Ala Ile Gly Asp Asn Lys Ile Val
 59 35 40
 61 <210> SEQ ID NO: 2
 63 <211> LENGTH: 8
 65 <212> TYPE: PRT
 67 <213> ORGANISM: Moraxella catarrhalis
 71 <400> SEQUENCE: 2
 73 Gly Thr Val Leu Gly Gly Lys Lys
 74 1 5
 76 <210> SEQ ID NO: 3
 78 <211> LENGTH: 24
 80 <212> TYPE: DNA
 82 <213> ORGANISM: Artificial sequence
 84 <220> FEATURE:
 86 <221> NAME/KEY: primer_bind
 88 <222> LOCATION: 1 to 24
 90 <223> OTHER INFORMATION: contains n
 94 <400> SEQUENCE: 3
 W--> 96 ggnacngtnc tnggnggnaa raar
 99 <210> SEQ ID NO: 4
 101 <211> LENGTH: 72
 103 <212> TYPE: DNA
 105 <213> ORGANISM: Moraxella catarrhalis

Mandatory, if <213> response
 is artificial/unknown, please
 explain in section <220>-<223>

please explain

what do "N" represent?

pls see item # 11 on error summary sheet.

RAW SEQUENCE LISTING

DATE: 07/21/2004

PATENT APPLICATION: US/09/813,214B

TIME: 10:42:26

Input Set : A:\Seq Listing 089-999.txt

Output Set: N:\CRF4\07212004\I813214B.raw

109 <400> SEQUENCE: 4
 110 gaagcggacg ggggggaaagg cggagccaat gcgcgcggtg ataaatccat tgctattggt 60
 112 gacattgcgc aa 72
 115 <210> SEQ ID NO: 5
 117 <211> LENGTH: 24
 119 <212> TYPE: PRT
 121 <213> ORGANISM: Moraxella catarrhalis
 125 <400> SEQUENCE: 5
 127 Glu Ala Asp Gly Gly Lys Gly Gly Ala Asn Ala Arg Gly Asp Lys
 128 1 5 10 15
 130 Ser Ile Ala Ile Gly Asp Ile Ala Gln
 131 20
 134 <210> SEQ ID NO: 6
 136 <211> LENGTH: 24
 138 <212> TYPE: DNA
 140 <213> ORGANISM: Artificial sequence
 142 <220> FEATURE:
 144 <221> NAME/KEY: primer_bind
 146 <222> LOCATION: 1 to 24
 148 <223> OTHER INFORMATION: contains n
 151 <400> SEQUENCE: 6
 W--> 153 ytttyttneen ccnagnacng tncc 24
 156 <210> SEQ ID NO: 7
 158 <211> LENGTH: 24
 160 <212> TYPE: DNA
 162 <213> ORGANISM: Artificial sequence
 164 <220> FEATURE:
 166 <221> NAME/KEY: primer_bind
 168 <222> LOCATION: 1 to 24
 170 <223> OTHER INFORMATION: contains n
 174 <400> SEQUENCE: 7
 W--> 176 ggnacngtnt trggnggnaa raar 24
 179 <210> SEQ ID NO: 8
 181 <211> LENGTH: 9542
 183 <212> TYPE: DNA
 185 <213> ORGANISM: Moraxella catarrhalis
 189 <400> SEQUENCE: 8
 190 ctattgactt aaatcaccat atggttataa tttagcataa tggtaggctt tttgtaaaaa 60
 192 tcacatcgca atattgtttt actgttacta ccatgcttga atgacgatcc aaatcaccag 120
 194 attcattcaa gtgatgtgtt tgtatacgca ccatttacc taattatttc aatcaaagtc 180
 196 ctatgtcagc atgtatcatt tttaaggtta aaccaccatg aatcacatct ataaagtc 240
 198 ctttaacaaa gccacaggca catttatggc cgtggcggaa tatgccaaat cccacagcac 300
 200 gggggggggg agctgtgcta cagggcaagt tggcagtgtga cgcactctga gctttgcccg 360
 202 tattgccgcg ctgcgtgtcc tcgtgatcgg tgcgacgctc aatggcagtg cttatgcagg 420
 204 tateggaatt agtgaagcag acgggggaaa aggcggagcc aatgcgcgcg gtgataaatc 480
 206 cattgctatt ggtgatattg ctcaggcact tggtctcaa tctattgcta tcggtgacaa 540
 208 caaatagtt cataattcaa ataataatgc taatataggt gccaaagcct caggtaatga 600
 210 gtccatcgcc atcgggtggtg atgtattggc ttctggtcac gcctcgattg ccacggtag 660
 212 tgatgactta tatttgaaaa aggaaacggt acagcaaatc tcagagcttc tacctattat 720

Same error

Same error

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING

DATE: 07/21/2004

PATENT APPLICATION: US/09/813,214B

TIME: 10:42:26

Input Set : A:\Seq Listing 089-999.txt

Output Set: N:\CRF4\07212004\I813214B.raw

214	tcgcgacag	aaagcattaa	acgatatata	ccaactagct	gacactaatc	ttcaaaaata	780
216	tagacgcaca	cacgcacagg	gacacgccag	tactgcagtg	ggagccatgt	catatgcaaa	840
218	gggtcatttt	tccaacgcct	ttggtacacg	ggcaacagct	gaaggtacct	attccttggc	900
220	agtgggtcct	accgccacag	ccaaagcagc	atcttcaatc	gctgttggtt	ctaatagcaca	960
222	agctatcggg	tttgacagca	cagccgttgg	tggaagtact	caagttaatt	tgaatcgagg	1020
224	tattgcccta	ggtttttggt	ctcaggctct	tcagaaggat	aatgatgtaa	atgcagcaaa	1080
226	tgtacgggcc	tatgcaccag	atgataacca	gccaatagac	aaccggtata	aagccacctt	1140
228	caagaatggt	gctacggatg	tattttccat	tggtaatagt	aatgggaatg	acagtatcag	1200
230	gcgtaaaatc	atcaatgtcg	gtgcagggtc	tgcggatacc	gatgcgggtc	atgtggcaca	1260
232	gcttaaagag	gcggtgaggc	tggctaatac	tcaaattact	tttaagggtg	atgatagcaa	1320
234	taatagagta	gaaaaagggt	tgggcaagac	tttaactatc	acagggtggt	cacagaccag	1380
236	cgcattaacc	gatcataaca	tccgtgtggt	acaaaatggc	gatggtctga	aagttcaact	1440
238	tgctgaaact	ttaaccagcc	ttaaaatggt	taccactgaa	aacctaaccc	ccaacgagaa	1500
240	agttaccgta	ggcaaaaacc	gccttaccac	agataaaaat	ggttttacca	atgatatgaa	1560
242	tggcattgat	gaaagcaaac	cttatcttga	taaagacact	ggcattcatg	caggtggtca	1620
244	aaagattacc	aaacttactg	ctggtgtagt	agatgacgat	gcggcaactt	atggacagct	1680
246	taaaaaagtt	aaccaaaccg	ctgaaagtgc	tctacaaacc	tttaccgtta	aaaaggtaga	1740
248	taaaaatggt	aatgatgcta	atgacagcaa	aatcatcacc	gtgggtaaaa	ataacaaacc	1800
250	agacggtact	caagtcaaca	ccctaaaact	caaagggtgaa	aacggtgttg	atgttacaac	1860
252	cgaacaaat	ggtacagtta	cctttgggct	taacccaaat	aacggtctga	ccgttggcaa	1920
254	cagcaccccta	aacaacgatg	gcttatctgt	taaaaacacc	aataagtaaca	aacaaatcca	1980
256	agtcggtgct	gatggcatta	catttactga	tatcagcaat	agtaagccag	gtgctggcat	2040
258	tgaaaatacc	actcgcatta	ccagagacgg	tattggtttt	gctaataata	ctggttcatt	2100
260	ggatgcaaac	aaaccccgcc	taaccccaac	tggcattaac	gcagggtggt	aagagctgac	2160
262	caatgtccaa	tctgccatta	accctgctac	caatggtggg	cagctagact	ttatgaaccg	2220
264	cctaagcact	gctaataccg	aaaaatcagg	ctctgccgcc	accattaaag	acttatacaa	2280
266	cctatcacaa	gtaccgctga	cctttgcagg	tgatacaggt	cctaattgtc	ccaaaaaact	2340
268	gggcgagatt	ttaaaaggta	aagggtggt	aaccacagct	gatgatttaa	ccaaaaataa	2400
270	catcggtgtg	gtggctgata	gtaccgataa	tagcttaacc	gttaaacttg	ctaaaacttt	2460
272	aagcgatcct	gatgcggtta	atactaaaaa	cctaactgcc	agcgataaag	ttaccgtaga	2520
274	cagtggcaac	aacaccgcta	agctacaaaa	tggtgattta	acctttagca	aacaaaatc	2580
276	aggtgctacc	cctgccacca	acagcaaaac	catctatggc	gttgatggct	tgaagtttac	2640
278	tgataacaat	ggtatagcac	ttgacggcac	aacttacatc	accaaagaca	aagttggctt	2700
280	tgctaagcaa	gatggttcac	ttgataaaa	caaaccttat	cttgataagg	acaagctaaa	2760
282	agtgggtgaa	gttgagatta	ccaccaacgg	cattaatgca	ggtggtaaa	ccatcacagg	2820
284	actaagcaat	accctaaccg	atgccacca	cgcaacaaca	gggcatgtaa	ctcaattggg	2880
286	tatcgttgat	agtactgaca	aaacccgtgc	cgccagcatt	ggtgatgtgc	taaacgcagg	2940
288	ctttaaccta	aaaaataatg	gtgacgccaa	agactttgtc	tccacttatg	acactgttga	3000
290	ttttatcaat	ggcaatgcca	ccaccgctaa	agtcacttat	gatggcaaa	ccagtaaagt	3060
292	ggcgtatgat	gtcaatgtgg	atggtacaac	cattcatcta	acaggcgctg	atggcaataa	3120
294	aaaccaaatt	ggcgtaaaaa	ccaccacact	gaccaaaaca	gatgctaagg	gtgataaagc	3180
296	aattaacttt	agtgttaact	ctggtgatga	caaagccctt	attaacgcca	aagacatcgc	3240
298	cgacaatcta	aacaccctag	ctggtgaaat	tcgcaacacc	aaaggcacag	cagacaccgc	3300
300	cctacaaacc	tttcaagtca	aaaaagtcaa	agaaaatggt	gatgatgata	atgacgctga	3360
302	caccatcacc	gtgggtaaa	atgcaaaaa	caatcaagtc	aacaccctaa	aactcaaagg	3420
304	taaaaacggg	cttgatattc	aaaccaataa	agatggtaac	gttacctttg	gcattaacac	3480
306	ccaaagcggg	cttaaagccg	gcaacaacac	cactctaaac	aacaatggct	tgtctattaa	3540
308	aaacaccgct	ggtaacgaac	aaatccaagt	cgggtgctgat	ggcgtgaagt	ttgccaaagt	3600
310	taataatggt	gttgtaggtg	ctggcattga	tggcacaact	cgcattacca	gagatgaaat	3660

RAW SEQUENCE LISTING

DATE: 07/21/2004

PATENT APPLICATION: US/09/813,214B

TIME: 10:42:26

Input Set : A:\Seq Listing 089-999.txt

Output Set: N:\CRF4\07212004\I813214B.raw

312	tggtcttctgct	gggactaatg	gctcacttga	taaaagcaaa	ccccaccta	gcaaagacgg	3720
314	cattaacgca	ggtggtaaaa	agattaccga	cattcaatca	ggtgagattg	cccaaacag	3780
316	caatgatgct	gtgacaggcg	gcaagattta	tgatttataa	accgaacttg	aaaacaaaat	3840
318	cagcagtact	gccaaaacag	cacaaaactc	attacacgaa	ttctcagtag	cagatgaaca	3900
320	aggtaataac	tttacggtta	gtaaccctta	ctccagttat	gacacctcaa	agacctctga	3960
322	tgtcatcacc	tttgacggtg	aaaacggcat	taccaccaag	gtaaataaag	gtgtggtgcg	4020
324	tgtgggcatt	gaccaaacca	aaggcttaac	cacgcctaag	ctgaccgtgg	gtaataataa	4080
326	tggtcaaaggc	attgtcattg	acagccaaaa	tggtcaaaat	accatcacag	gactaagcaa	4140
328	cactctagct	aatgttacca	atgataaagg	tagegtacgc	accacagaac	agggcaagat	4200
330	aatcaaagac	gaagacaaaa	cccgtgccgc	cagcattggt	gatgtgctaa	gcgcaggctt	4260
332	taacttgcaa	ggcaatggtg	aagcggttga	ctttgtctcc	acttatgaca	ctgtcaactt	4320
334	tgccgatggc	aatgccacca	ccgctaaggt	gacctatgat	gacacaagca	aaaccagtaa	4380
336	agtggctctat	gatgtcaatg	tggatgatac	aaccattgaa	gttaaagata	aaaaacttgg	4440
338	cgtaaaaacc	accacattga	ccagtactgg	cacagggtgt	aataaatttg	ccctaagcaa	4500
340	tcaagctact	ggcgtatg	ttgtcaaggc	cagtgtatgc	gttgtctatc	taaacacctt	4560
342	atctggcgac	atccaaactg	ccaaaggggc	aagccaagcg	aacagctcag	caggctatgt	4620
344	ggatgctgat	ggcaataaag	tcactctatga	cagtaccgat	aacaagtact	atcaagccaa	4680
346	aaatgatggc	acagttgata	aaaccaaaga	agttgccaaa	gacaaaactg	tcgccaagc	4740
348	ccaaacccca	gatggcacat	tggctcaa	gaatgtcaaa	tcagtcat	acaaagaaca	4800
350	agtaaatgat	gccaataaaa	agcaaggcat	caatgaagac	aacgcctttg	ttaaaggact	4860
352	tgaaaaagcc	gcttctgata	acaaaaccaa	aaacgccgca	gtaactgtgg	gtgatttaaa	4920
354	tgccgttgcc	caaacaccgc	tgacctttgc	aggggatata	ggcacaacgg	ctaaaaaact	4980
356	gggcgagact	ttgaccatca	aagggtgggca	aacagacacc	aataagctaa	ccgataataa	5040
358	catcggtgtg	gtagcaggta	ctgatggctt	cactgtcaaa	cttgccaaag	acctaacc	5100
360	tcttaacagc	gttaatgcag	gtggtacca	aattgatgac	aaaggcgtgt	ctttttaga	5160
362	ctcaagcgg	caagccaaag	caaacacccc	tgtgctaagt	gccaatgggc	tggaacctgg	5220
364	tggaaggtc	atcagcaatg	tgggcaaaag	cacaaaagac	accgacgctg	ccaatgtaca	5280
366	acagttaaac	gaagtacgca	acttgttggg	tcttggtaat	gctggtaatg	ataacgctga	5340
368	cggcaatcag	gtaaacattg	ccgacatcaa	aaaagaccca	aattcaggtt	catcatctaa	5400
370	ccgcaactgc	atcaaagcag	gcacggtact	tggcggttaa	ggtaataacg	ataccgaaaa	5460
372	acttgccact	aagtgggtac	aagtgggcgt	ggataaagac	ggcaacgcta	acggcgattt	5520
374	aagcaatggt	tgggtcaaaa	cccaaaaaga	tggcgcaaaa	aaagccctgc	tcgccactta	5580
376	taacgccgca	ggtcagacca	actattttgac	caacaacccc	gcagaagcca	ttgacagaat	5640
378	aaatgaacaa	ggtatccgct	tcttccatgt	caacgatggc	aatcaagagc	ctgtggtaca	5700
380	agggcgtaac	ggcattgact	caagtgcctc	aggcaagcac	tcagtggcga	taggtttcca	5760
382	ggccaaggca	gatggtgaag	ccgccgttgc	cataggcaga	caaaccgaag	caggcaacca	5820
384	atccatcgcc	atcggtgata	acgcacaagc	cacaggcgat	caatccatcg	ccatcggtac	5880
386	aggcaatgtg	gtagcaggta	agcactctgg	tgccatcggc	gacccaagca	ctgttaaggc	5940
388	tgataacagt	tacagtgtgg	gtaataacaa	ccagtttacc	gatgccactc	aaaccgatgt	6000
390	ctttggtgtg	ggcaataaca	tcaccgtgac	cgaaagtaac	tcggttgcc	taggttcaaa	6060
392	ctctgccatc	agtgcaggca	cacacgcagg	cacacaagcc	aaaaaatctg	acggcacagc	6120
394	aggtacaacc	accacagcag	gtgcaaccgg	tacggttaaa	ggctttgctg	gacaaacggc	6180
396	ggttggtg	gtctccgtgg	gtgcctcagg	tgtgaaacgc	cgtatccaaa	atgtggcagc	6240
398	aggtgaggtc	agtgccacca	gcaccgatgc	ggtcaatggt	agccagttgt	acaaagccac	6300
400	ccaaggcatt	gccaacgcaa	ccaatgagct	tgacctcgt	atccacaaa	acgaaaataa	6360
402	agccaatgca	gggatttcat	cagcgatggc	gatggcgctc	atgccacaag	cctacattcc	6420
404	tggcagatcc	atgggtaccg	ggggatttgc	caccacaac	ggtcaagggtg	cgggtggcagt	6480
406	gggactgtcg	aaggtgtcgg	ataatgggtca	atgggtattt	aaaatcaatg	gttcagccga	6540
408	taccaaggc	catgtagggg	cggcagttgg	tgcaggtttt	cacttttaag	ccataaatcg	6600

RAW SEQUENCE LISTING

DATE: 07/21/2004

PATENT APPLICATION: US/09/813,214B

TIME: 10:42:26

Input Set : A:\Seq Listing 089-999.txt

Output Set: N:\CRF4\07212004\I813214B.raw

410	caagatttta	cttaaaaaatc	aattctacca	tagttgtata	aaacagcatc	agcatcagtc	6660
412	atattactga	tgtgatggt	ttttatcact	taaaccattt	taccgctcaa	gtgattatct	6720
414	ttcaccatga	ccaaatcgcc	attgatcata	ggtaaactta	ttgagtaa	tttatcaatg	6780
416	tagttgttag	atatggttaa	aattgtgcca	ttgacaaaa	aattaccgat	ttatcccgaa	6840
418	aatttctgat	tatgatcact	tttcataaat	ttccccaatt	tgtctttata	aatatcccaa	6900
420	gaaatggtat	tattttattg	ccatcagcat	atgcgacaac	tcacgctatc	atctttttat	6960
422	cataaaaaatg	caaataggca	tatgcatttt	ttgaattgaa	cttacgcaact	gagagatccc	7020
424	ctcataat	ccccaaagcg	taaccatgtg	tgaataaatt	ttgagctagt	aggggtgcag	7080
426	ccacgagtaa	gtcttccctt	gttattgtgt	agccagaatg	ccgcaaaact	tccatgccta	7140
428	agcgaaactgt	tgagagtacg	tttcgat	tgactgtgtt	agcctggaag	tgcttgcccc	7200
430	aaccttggtt	ctgagcatga	acgcccgcga	gccaaacatgt	tagttgaagc	atcagggcgga	7260
432	ttagcagcat	gatatacaaa	cgtctcgagc	tgctcggtcg	gctatggcgt	aggcctagtc	7320
434	cgtaggcagg	acttttcaag	tctcggaagg	tttcttcaat	ctgcattcgc	ttcgaataga	7380
436	tattaacaag	ttgtttgggt	gttcgaattt	caacaggtaa	gttagttgct	agaatccatg	7440
438	gtccttttgc	cgacgctgag	tagatttttag	gtgacgggtg	gtgacaatga	gtccgtgtcg	7500
440	agcgctgatt	ttttcggcct	ttagagcgag	atttatacaa	tagaatttgg	catgagattg	7560
442	gattgctttt	agtcagcctc	ttatagccta	aagtctttga	gtgactagat	gacatatcat	7620
444	gtaagttgct	gataggtttc	cagttttccg	ctcctaggtc	tgcatattgt	acttttccctc	7680
446	ttactcgact	taaccagtac	caaccagct	tctcaacgga	tttataccat	ggcactttaa	7740
448	agccagcatc	actgacaatg	agcgggtgtg	tgttactcgg	tagaatgctc	gcaaggtcgg	7800
450	ctagaaattg	gtcatgagct	ttctttgaac	attgctctga	aagcgggaac	gcttttctcat	7860
452	aaagagtaac	agaacgaccg	tgtagtgcga	ctgaagctcg	caataccata	agccgttttt	7920
454	gtcacgggat	atcagaccag	tcaacaagta	caatgggcat	cgtattgccc	gaacagataa	7980
456	agctagcatg	ccaacgggat	acagcgagtc	gctctttgtg	gaggtgacga	ttacctaaaca	8040
458	atcggtcgat	tcgtttgatg	ttatgttttg	ttctcgcttt	ggttggcagg	ttacggccaa	8100
460	gttcggtgaag	agtgaaggtt	ttacagtcaa	gtaaggcgtg	gcaagccaac	gttaagctgt	8160
462	tgagtcgttt	taagtgtaat	tcggggcaga	attggtaaag	agagtcgtgt	aaaatatcga	8220
464	gttcgcacat	tttgttgtct	gattattgat	ttttggcgaa	accatttgat	catatgacaa	8280
466	gatgtgtatc	taccttaact	taatgatttt	gataaaaaatc	attaggggat	tcacagact	8340
468	tacgcatactt	tcattatggg	aattaggtca	gtaattatga	caaaaaatta	tgcattatta	8400
470	tcctgtctcag	ataaaacgca	aatcgttgaa	tttgcccaag	gtttggtaga	atctggcttt	8460
472	ggtattttat	ccacaggtgg	tacttttaaa	ctcttaaaag	aacatgggat	tgacgccatt	8520
474	gaggtttctg	cccatacagg	ttttgctgaa	atgatggatg	gtcgtgttaa	gaccctacat	8580
476	cccaaaattc	atggtgggat	tttggggcgt	cgtggcattg	atgatgccat	tatgaatgaa	8640
478	catggcattg	atcgcatgga	tatcgttgtc	gtgaatttat	atccatttgc	caacacggtc	8700
480	gccaaagacg	gtgttggtat	gtctgatgcg	attgaaaata	ttgatattgg	tgggcctgct	8760
482	atggtacgct	cagccgcca	aaatcatgcc	catgttggtg	ttatcaccag	cccaaatgac	8820
484	tactcacgca	tcctagatga	actaaaaaac	caaggctcatt	taagccacaa	cactcgtttt	8880
486	gatttggcag	tcaaagcatt	tgaacacact	gccgcctatg	atggtatgat	tgccagctgg	8940
488	ctaggtgcac	gcttaccagt	ggataaagag	acggcaccca	gtgatgatgc	cactgcaacc	9000
490	actcaatttt	cacgcacttt	taatcaccaa	ttcaccaaag	cacaagagct	tagatatggc	9060
492	gaaaaceccac	atcagtcagc	agccttttat	gtagatgatc	atgcaacaga	agcgtctggt	9120
494	gcgactgcac	agcaattaca	aggtaaaagc	ttgtcttata	ataatattgc	tgataccgat	9180
496	gcggcacttg	agtgtgtcaa	atcttttacc	acgcctgctt	gtgtgattgt	caaacatgcc	9240
498	aatccttggtg	gtgttgcaac	atcagaaaaac	ggatatttag	atgcttatca	cttagcatat	9300
500	gcaaccgatc	ctgaatctgc	ctttgggtggc	attattgcct	ttaaccgaga	attagacagt	9360
502	gatacagccc	gtaccatcgt	tgagcgtcaa	tttgttgaag	tcacatcgc	accaagcatc	9420
504	gctgaagggtg	ttctagagcg	gccgcggggc	categatttt	ccacccgggt	ggggtagacc	9480
506	gtaagtgtac	ccaattcgcc	ctatagttag	tcgtattaca	attcactggc	cgtcgtttta	9540

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/813,214B

DATE: 07/21/2004
TIME: 10:42:27

Input Set : A:\Seq Listing 089-999.txt
Output Set: N:\CRF4\07212004\I813214B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 3,6,9,12,15,18
Seq#:6; N Pos. 7,10,13,16,19,22
Seq#:7; N Pos. 3,6,9,15,18
Seq#:13; N Pos. 6,12,15
Seq#:14; N Pos. 4,13

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:14; Line(s) 1034

VERIFICATION SUMMARY

DATE: 07/21/2004

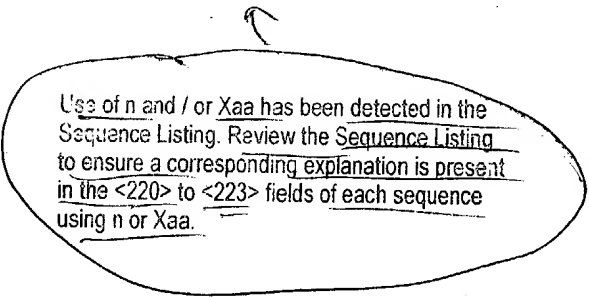
PATENT APPLICATION: US/09/813,214B

TIME: 10:42:27

Input Set : A:\Seq Listing 089-999.txt

Output Set: N:\CRF4\07212004\I813214B.raw

L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:153 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:1011 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:1034 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0



Use of n and / or Xaa has been detected in the
Sequence Listing. Review the Sequence Listing
to ensure a corresponding explanation is present
in the <220> to <223> fields of each sequence
using n or Xaa.